

ABSTRACT

An electrostatic discharge (ESD) protection circuit formed on a P-type substrate has a first p^+ diffusion region in the P-type substrate, a N-well in the P-type substrate, a first n^+ diffusion region in the N-well, a P-well in the N-well, and an n-p-n bipolar junction transistor (BJT) in the P-well. An equivalent circuit between a base and an emitter of the BJT is a diode without connecting to any resistor in parallel.